

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10. (canceled)

Claim 11. (previously presented) A system for automatically testing in parallel multiple variable air volume (VAV) boxes coupled to the same floor level network comprising:

a building level network interface for communicating with a floor level network from a building level network; and

a test manager for sending at least one test parameter to a plurality of variable air volume (VAV) boxes coupled to the floor level network so that at least two VAV boxes are responding to the one test parameter at approximately the same time, the test manager operable to send different test parameters to different VAV boxes based on different design configurations of the different VAV boxes.

Claim 12. (original) The system of claim 11 wherein the test manager sends through the building level network interface at least one test parameter associated with a first test procedure to a first VAV box coupled to the floor level network; and

also sends through the building level network interface at least one test parameter associated with a second test procedure to a second VAV box coupled to the floor level network so that the first and second VAV boxes are responding to a test parameter associated with different test procedures at approximately the same time.

Claim 13. (currently amended) The system of claim 11, wherein the test manager sends a calibration procedure parameter to a first VAV box coupled to the floor level network; and the test manager delays before sending the calibration procedure parameter to a second VAV box coupled to the floor level network so that the first and second VAV boxes are not responding to the calibration procedure parameter at ~~approximately~~ the same time.

Claim 14. (original) The system of claim 11, the test manager further comprising:
a receiver for receiving test messages from the VAV boxes coupled to the floor level network in response to the at least one test parameter sent to the VAV boxes; and
an analyzer for analyzing the test messages received from the VAV boxes to determine whether a VAV box passed a test.

Claim 15. (original) The system of claim 14, wherein the analyzer determines a cause for a test failure from at least one test message received from at least one VAV box.

Claim 16. (original) The analyzer of claim 14, further comprising:
a warning generator for generating a warning in response to a VAV box passing a test, the warning indicating a marginal condition in the VAV box.

Claim 17. (original) The system of claim 11, wherein the test manager polls through the building level network interface a plurality of devices coupled to the floor level network and

stores identifiers in a VAV procedure list that correspond to VAV boxes coupled to the floor level network.

Claim 18. (original) The system of claim 11 further comprising:

a data repository for storing at least one test parameter for a calibration procedure, an auto zero module procedure, a damper operation and airflow procedure, a heating function procedure, and a control function procedure; and

the test manager sends at least one test parameter from each procedure stored in the data repository to at least one of the VAV boxes coupled to the floor level network.

Claim 19. (original) The system of claim 18, wherein the test manager terminates testing of a VAV box coupled to the floor network in response to the VAV box failing to calibrate.

Claim 20. (original) The system of claim 18, wherein the test manager determines whether a temperature message received from a VAV box in response to a test parameter for the heating function procedure contains a room temperature or a discharge temperature.

Claim 21. (canceled)

Claim 22. (new) A method for automatically testing with a processor multiple variable air volume (VAV) boxes coupled to a network comprising:

determining a first test procedure to be conducted with the first VAV box based at least in part upon an identified type of the first VAV box;

determining a second test procedure to be conducted with the second VAV box based at least in part upon an identified type of the second VAV box, the identified type of the second VAV box different from the identified type of the first VAV box and the second test procedure different from the first test procedure;

sending at least one test parameter associated with the first test procedure to the first VAV box; and

sending at least one test parameter associated with the second test procedure to the second VAV box so that the first and second VAV boxes are responding to the respectively received at least one first and second test procedure parameter at about the same time.

Claim 23. (new) The method of claim 22 further comprising:

sending a calibration procedure parameter to the first VAV box;

delaying for a predetermined amount of time; and

sending the calibration procedure parameter to a second VAV box after the delay so that the first and second VAV boxes are not responding to the calibration procedure parameter at the same time.

Claim 24. (new) The method of claim 22 further comprising:

receiving test messages from the first and the second VAV boxes in response to the respectively received at least one first and second test procedure parameter;

determining if the first and the second VAV boxes passed the first and second test procedure, respectively; and

identifying each VAV box that did not pass the respective test procedure.

Claim 25. (new) The method of claim 24, further comprising:

determining if the first and the second VAV boxes passed the first and second test procedure, respectively, within a predetermined margin; and

generating a warning in response to each VAV box that passed the respective test within the predetermined margin.

Claim 26. (new) The method of claim 22 further comprising:

polling a plurality of devices coupled to the network;

receiving an identifier from each of the plurality of devices in a response to the polling; and

storing the received identifier in a VAV procedure list in response to a determination that the device is a VAV box.

Claim 27. (new) A building control system comprising:

a network;

a first variable air volume (VAV) box of a first type coupled to the network;

a second VAV box of a second type coupled to the network, wherein the second type is a type different from the first type; and

a test manager operable to execute a plurality of tests and programmed to

identify VAV boxes coupled to the network

determine the type of the VAV boxes coupled to the network and

select from the plurality of tests a set of tests to be conducted for each type of VAV box identified on the network.

Claim 28. (new) The building control system of claim 27, wherein the plurality of tests comprises:

a calibration test;

an auto zero test;

a damper operation and airflow test;

a heating function test; and

a control test.

Claim 29. (new) The building control system of claim 27, wherein:

the first type of VAV box includes a heating function;

the second type of VAV box does not include a heating function;

the set of tests to be conducted for the first type of VAV box includes a heating function test; and

the set of tests to be conducted for the second type of VAV box does not include a heating function test.

Claim 30. (new) The building control system of claim 27 wherein:

the first type of VAV box includes an electrical heating function;

the second type of VAV box includes a hot water heating function;

the set of tests to be conducted for the first type of VAV box includes an electrical heating function test; and

the set of tests to be conducted for the second type of VAV box includes a hot water heating function test.

Claim 31. (new) The building control system of claim 27, wherein:

the set of tests to be conducted for the first type of VAV box includes at least one test;

the set of tests to be conducted for the second type of VAV box includes at least one test; and

the at least one test for the first type of VAV box is conducted at approximately the same time as the at least one test for the second type of VAV box.